

**REMARKS**

Claims 1-7, 12-15 and 37-42 are pending. By this Amendment, claims 1, 4, 5 and 12 are amended, dependent claims 37-42 are added, and non-elected, withdrawn claims 8-11 and 16-36 are cancelled. Applicant reserves the right to file one or more divisional applications to pursue the cancelled, non-elected claims.

The claims are amended to even more clearly distinguish over the applied reference. Support for the features added to independent claims 1, 4 and 12 can be found in the original specification at, for example, paragraph [0088]. Support for the features recited in newly-added dependent claims 37, 39 and 41 can be found in original specification paragraph [0053], for example; and support for the features recited in newly-added dependent claims 38, 40 and 42 can be found in original specification paragraph [0054], for example. Thus, no new matter is added by the above amendments.

**I. December 21, 2001 Information Disclosure Statement**

Applicant requests the Examiner to consider the references submitted with an Information Disclosure Statement that was filed with this application on December 21, 2001. A copy of the December 21, 2001 Information Disclosure Statement and PTO-1449 accompanying that Information Disclosure Statement are attached hereto. Although the December 21, 2001 Information Disclosure Statement did not appear in the Patent Office's Image File Wrapper (which Applicant's undersigned attorney accessed by PAIR), it is noted that the foreign reference identified in the PTO-1449 of the Information Disclosure Statement apparently was scanned by the Patent Office, and is available in this application's electronic file wrapper.

**II. All Pending Claims are Patentable**

As indicated above, withdrawn, non-elected claims 8-11 and 16-36 have been cancelled.

Claims 1-7 and 12-15 stand rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,931,441 to Sakamoto. This rejection is respectfully traversed.

Sakamoto does not disclose or suggest the combination of steps recited in independent claim 1, including, *inter alia*, the step of "updating the force to be applied to the base plate based on the vibration of the base plate." Sakamoto also does not disclose or suggest the stage apparatus of independent claim 4, including, *inter alia*, a controller that performs the function of "updating the force to be applied to the base plate based on an acceleration of the base plate." Sakamoto also does not disclose or suggest the stage apparatus recited in independent claim 12 including, *inter alia*, a controller that performs the function of "updating the force to be applied to the base plate based on vibrations detected by the vibration detector."

As described in the portions of Sakamoto cited in the Office Action, Sakamoto determines mechanical constants of the system, such as the position of centroid, the moment of inertia and the principal axis of inertia by applying force with the actuators 207A (col. 19, lines 8-13 and 59-67), and subsequently adjusts the force that is applied to the system in order to suppress vibrations based on the determined mechanical constants (col. 20, lines 1-4 and lines 46-67, for example). However, Sakamoto does not update the force that is to be applied to the system based on the vibrations or accelerations that are detected as described, for example, in paragraph [0088] of the present application, and as now recited in independent claims 1, 4 and 12. Although Sakamoto determines the thrust that is to be applied by each actuator based upon "real-time vibration information monitored by sensors" (col. 20, lines 11-17), these vibrations are not the same vibrations used to determine the position of a center of gravity and of a major inertia axis of the stage apparatus, as is recited in independent claims 1, 4 and 12.

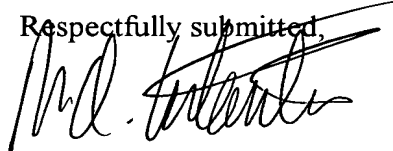
Accordingly, Sakamoto does not disclose or suggest all features of independent claims 1, 4 and 12. Withdrawal of the rejection under 35 U.S.C. §102(b) is requested.

**III. Conclusion**

In view of the foregoing, Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,



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MAC/ccs

**Attachments:**

Petition for Extension of Time  
December 21, 2001 IDS and PTO-1449

Date: April 28, 2004

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